MAREK NIIT - competition activities 2007 – 2008, lessons learnt and conclusions.



MAREK	NIIT
Born	9.08.1987
Tallness	183 cm
Weight	3 kg

	Pr	ogress of r	results	
	60m	100m	200m(in	d.) 200m
2003	7,21	11,52		23,53
2004	6,96	10,83		21,71
2005	6,90	10,58	21,54	21,24
2006	6,74	10,51	21,23	20,96
			wor	Id junior champion !!!
2007	6,73	10,42	21,09	20,69
2008		10,44		20,64 (+2,3m/s)

Marek Niit started with studies at Audentes Sportschool on September 1, 2003, at the age of 16. This is when he started with regular trainings in athletics. Before his studies at Audentes he only participated in competions, representing his school in different sport events. At the age of 15 his 100m time -11,52 and 200m - 23,55 - were achieved without any training.

As a coach I understand that this new student had big perspective for the future – since his manner to run was light, relaxed and with good frequency. Also Marek's parents participated in sprint when they were young and his father's achievement in 100m at the of 17 was 10,8.

The first years of trainings with Marek were learning lessons. I taught him the meaning of sport as such, the basis of trainings, basic elements of run. Since physically Marek was weak, I started "building up", the most important – strengthening his body muscles. My principle is, that everything will come in its own time or a little bit later. And later is better because "later" gives more certainty. The process of training is a constant being on the look-out and finding, sometimes making mistakes and finding again but always

moving forward. Only the one who does not do anything, does not make mistakes. Constant analysis of the results, giving sense to what is done moves us forward. There is a saying by Confucius:

"There are three ways to reach the sagesse. The first way is through your own experience – this is the most difficult one. The second way is to follow somebody's example – this one is probably the easiest. The third way is to reach the truth through thinking – the most high-minded and the most honest way".

The aim of the present work is to show what kind of problems I had training the sportsman and my analysis of the training process and decisions for changes to be made – in order to progress in development.

I would like to remember here some thoughts concerning the principal building up of a sprinter, which were presented some time ago in the magazine "Ljoghkaja atletika" by Edvin Ozolin. Speed muscular tissue belongs to the muscular group located closer to the surface of the skin. These muscles are situated further away from the spinning axle and have respectively a bigger trigger of strength. The main muscles of this group are erctor spinae, oblique and rectus abdominis and they are usually involved in traditional exercises to develop strength of the back and abdomen. Inner groups of muscles are considered as stabilizing ones, driven by the central nervous system and informing about changes in the position of joints. Any movement is characterized in the beginning by tension in the inner layer of muscles, therefore active use of this particular one is decisive in stabilizing the posture position of the body in any action.

When running, sportsmen push away from the surface of the track and give a push which passes to the whole mass of the body. The energy of the push, transmitted into the upper part of the body, may be essentially absorbed in case it reaches a supple structure, or it may realize itself with high efficiency. For example, playing billiard, your ball hitting the other ball transmits an essencial amount of its energy to it and the ball bursts away with high speed. Now let us replace the other ball with a soft rubber one – it will move after the hit much slower – the energy is absorbed by the soft structure. The same analogy exists in sport exercise. Our task is to make the segment of the body which receives energy maximum strong. This is where well developed muscular system is of great benefit and antagonistic muscle groups which surround different joints. Thus, with simultaneous tension of different muscle groups surrounding the joint, the last "repulses" so that the whole system becomes quite rigid. In other words, if we manage to fix some groups of joints, then the system forming the posture will serve to the perfection of the intended athletic exercise and at the same time it will exlude a performance of unwilling additional movements.

It is indispensable to consider in the given work the research of doctor G.Vorobjov. A weak foot is the consequence of the wrong understanding of its main functions. Full value of the foot depends directly on the functional condition of the tissue, retaining longitudinal arch of the foot – it is mainly sole muscles.

When we train these particular tissue in the wrong way they get over-loaded, "tired", which results in lowering of the arch, so that during the run the sportsman as if adheres to the track. The functional deficiency becomes chronical and results in Morton desease.

Often a weak foot results in over-load to upper muscles, this time the shin muscles. Even comparatively strong muscles get over-loaded. In order to train strong foot, it is necessary to have in the training programme local physical exercises in isometric or even surmountable rezime.

Competitions – 2007

29.05	"Grand Prix" Estonia 200m 20,4		
2.6	Estonian Championship in relays 4x100m and 200m		
3. – 4.06	temperature 37,5, cough		
5.6	"Grand Prix" Estonia 200m 20,69 – new national record!		
9.6	competition in Helsinki 100m 10,42,		
	injury of the back side of the thigh		
1025.06	temperature 38,0, cough		

Needless to say, in the given situation the most important thing was to clear up the reason **why it so happened?** In my considerations I have found out the following reasons:

- 1. Too high competitions intensity (either wishing to be succeessful, especially in "Grand Prix", where financial rewards are remarkable, or the need to represent his sport club in relays).
- 2. It is absolutely out of the question to compete when there are health problems, without being 100% recovered. Often sportsmen coaches show sport bravery surpassing sober senses, as it has happened with me and my student. This thoughtless bravery pays back by enormous load on sportsman's body, the consequences of which may be very serious.
- 3. One of the definite components of the training process is a consistent solution of recovering. Although Marek had all the necessary possibilities of recovering (such as massage once or twice a week, health capsule and infrared sauna), he was not consistent enough. It is important to follow here the principle of doing all necessary just in the right time and not afterwards, sometimes later.

One of the main reasons for why injuries occur in sports is over -load, which may be:

- 1. visible, distinguishable over-load (as excessive or too intensive training or competition overload).
- 2. invisible, hidden over-load.

We are used to adjust to the right charge and intensity with the help of the correct training methods, coaches have rich experience in this matter.

Unfortunately, there is too little attention paid to the support – motion system of the body and therefore the principles for its harmonious development are often ignored. The practical experience proves that it is just weaker joints where over-load concentrates and where injuries occur. Needless to say, in case of the proper approach and harmoneous development of all joints of the support – motion system, the danger of injury is diminished.

The back thigh injuries occur most often for the following reasons:

- 1. weak muscles of the back thigh muscle group. The strength of the back thigh muscle should form 60 70% of the front thigh muscles. In case back thigh muscles are weaker than forseen by the norm, there is a big danger for muscle injuries in the back part of the thigh, caused by disbalance or, in other words, lack of equilibrium between the front and back thigh muscles.
- 2. insufficient elasticity and flexibility of muscles, shortened muscles.
- 3. insufficient or incorrect strength training.
- 4. muscle weariness, wrong eating and wrong consumtion of liquid.
- 5. wrong methods of training, too big competition stress.

There are special exercises for back thigh muscles:

- 1. static stretching exercises
- 2. isometric strength exercises
- 3. dynamic strength exercises.

In order to measure pressure on Marek's feet we have used the help of medical and sport researchers. Measuring the distribution of pressure is an objective method for diagnostics of the condition of support – motion system of the body, used in medicine as well as rehabilitation treatment (including, for example, prevention of injuries caused by overload) and planning of treatment. It allows assertion based analysis and estimation of the results of treatment. As an outcome of such measuring there were made special feet supports to even the pressure on feet as well as on the whole support – motion system of the body.

Having in mind everything mentioned earlier we were preparing for 2008. We made but small corrections in the building up of the training work, keeping in mind that "what is not damaged does not need to be repaired". Do not change the well – working training programme, but keep improving it all the time. What changed was Marek's attitude towards advantages of rehabilitation, towards independent perfomance of special exercises. In short, his attitude has become much more professional.

We have put together the calendar of competitions in the way to give enough time to the body to recover - to be able for maximum tension at the next competition.

The competition season has started as planned and very positively. After a couple of introductory competitions Marek won 200m race in the II leaque of the European Cup in Tallinn, with good result of 20,64 (wind + 2,3m/sec). After that we concentrated on training with higher intensity and Marek's form was improving further. On July 16 at Estonian Championship with very nasty weather (+15 C, cold wind – 1,0 m/sec) he run 100m first round in a relaxed manner 10,44. The technical performance of the run gave no doubt a very positive emotion to the public. Unfortunately, two hours later, in the final race he tried hard, lost his relaxed way of running and in finish the back muscle of his thigh got injured (diagnosis- microrupture). Another lesson to be learnt!!!

Our experience was enriched with the following conclusions:

- 1. On such a cold competition day it was absolutely impermissible to run with maximum tension the second half of the competition season was still ahead of us including Olympic Games in Beijing, which we had to give up.
- 2. Marek's manner of run is characterized by relax, comparatively slow and longlasting phase of accelleration. This is why we consider that his main distance is 200m and next to it rather 400m than 100m race. In 200m race it is possible to switch over the speed, to keep a watch on a relaxed manner of run these are technical skills which Marek dominates and which are impossible to demonstrate in 100m race.

To terminate it is possible to stress once again what was said earlier. The process of training is a constant being on the look out and finding, sometimes making mistakes and finding again but always moving forward.

Starting with October 1, 2008 Marek studies and trains in USA, at the University of Arkansas. We hope that this change will permit Marek's talent to open up further on. Why did we make such a choice:

1. Whereas Marek has been training for 5 years under the same conditions, the

same training people, under the supervision of the same coach, we expect a positive result from the change of the surroundings and general atmosphere.

2. A couple of years ago there were top sprinters – T.Gay, W.Spearmon, V.Campbell, who trained at Arkansas University. The training experience at this university is at the necessary level.

3. There are excellent training facilities at Arkansas University, where we have organized our training camps for two years already. It is not an unknown place for him.

4. The climate conditions are far better for the sprinter.

You believe in something and you succeed, and if you do not believe you do not succeed.



Wallace Spearmon, Valter Espe, Kyle White (coach of Arkansas University), Marek Niit

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VALTER ESPE